

# Genetic and Evolutionary Computation Conference (GECCO-2003)

## Call for Participation

**12-16 July (Saturday-Wednesday) 2003, Holiday Inn Mart Plaza, Chicago Illinois, USA**

**Genetic Programming Conference (GP 2003) and the International Conference on Genetic Algorithms (ICGA 2003)**

**[www.isgtec.org/GECCO-2003](http://www.isgtec.org/GECCO-2003)**



The *Genetic and Evolutionary Computation Conference (GECCO-2003)* will present the latest high-quality results in the growing field of genetic and evolutionary computation. There will be three days of technical sessions with papers from 13 different program tracks, two invited speakers, 32 tutorials by internationally acclaimed experts, and a poster session. There will be several workshops on special interest topics, including a Graduate Student workshop, and Undergraduate Student Workshop, Late Breaking Papers, Evolutionary Computation in Industry, the International Workshop on Learning Classifier Systems, and more. All this is included for a single registration fee. Participants will receive proceedings in print and on CD. All papers and posters are rigorously reviewed by independent program committees of specialists.

*Conference Chair:* James A. Foster

*Proceedings Editor-in-chief:* Erick Cantu-Paz

*Business Committee:* David E. Goldberg, John Koza

*Workshops Chair:* Alwyn Barry

*Late Breaking Papers Chair:* Bart Rylander

## Program Tracks and Chairs

*Genetic Programming:* Una-May O'Reilly

*Genetic Algorithms:* Kalyanmoy Deb

*Evolution Strategies & Evolutionary Programming:* Hans-Georg Beyer

*Real World Applications:* Rajkumar Roy and David Davis

*Learning Classifier Systems:* Stewart Wilson

*Evolvable Hardware:* Julian Miller

*A-Life, Adaptive Behavior, Agents, & Ant Colony Optimization:* Russell Standish

*Search Based Software Engineering:* Mark Harman, Joachim Wegener

*Evolutionary Robotics:* Alan C. Schultz, Mitchell A. Potter

*Evolutionary Scheduling & Routing:* Kath Dowsland

*DNA, Molecular & Quantum Computing:* Natasha Jonoska

*Coevolution:* Graham Kendall

*Artificial Immune Systems:* Dipankar Dasgupta

## TUTORIALS

Sunday, July 13, will be filled tutorials from some of the world's foremost experts on topics of interest to genetic and evolutionary computation researchers and practitioners. These are at no additional charge.

## WORKSHOPS

Saturday, July 12 will have several half-day workshops on a variety of specialty topics. See [www.isgtec.org/GECCO-2003/workshops](http://www.isgtec.org/GECCO-2003/workshops) for the latest list of topics and scheduling information. There will also be three full-day workshops on July 12: a Graduate Student Workshop (GSW), the International Workshop on Learning Classifier Systems (IWLCS), and Evolutionary Computation in Industry (ECI).

## ABOUT CHICAGO

The conference will be held at the Holiday Inn Mart Plaza in Chicago at a reduced rate of \$135 a night, with inexpensive nearby student housing. This site is readily accessible to both O'Hare and Midway international airports by public transportation, shuttles, and taxi, with easy access to several Chicago attractions and restaurants, Lake Michigan, and Grant Park. For Chicago tourist information, visit [www.ci.chi.il.us/Tourism](http://www.ci.chi.il.us/Tourism). See the conference website for travel details.

## STUDENT TRAVEL AND HOUSING GRANTS

Financial assistance is available to a limited number of students. See the conference website for details.

## ADDITIONAL INFORMATION

For information visit [www.isgtec.org/GECCO-2003](http://www.isgtec.org/GECCO-2003). For technical matters, email James A. Foster, GECCO-2003 General Chair: [gecco-chair@cs.uidaho.edu](mailto:gecco-chair@cs.uidaho.edu). For administrative matters, email [gecco@aaai.org](mailto:gecco@aaai.org). This conference is administered by the American Association for Artificial Intelligence, 445 Burgess Drive, Menlo Park, CA 94025 USA. Phone: 650-328-3123. Fax: 650-321-4457. It is operated by the International Society for Genetic and Evolutionary Computation, Inc., a not-for-profit corporation.

## INTRODUCTORY TUTORIALS

Genetic Algorithms  
Genetic Programming  
Evolution Strategies  
Learning Classifier Systems  
Genetics  
Immune System Computing  
Ant Colony Optimization  
Parallel Genetic Algorithms  
Data Mining and Machine Learning

Robert Heckendorn  
John Koza  
Hans-Paul Schwefel  
Stewart Wilson  
Annie S. Wu  
Stephanie Forrest  
Martin Middendorf  
Erick Cantu-Paz  
Hilol Kargupta

## ADVANCED TUTORIALS

Genetic Programming Theory I & II  
Mathematical Theory of EC  
Design of Innovation & Competent GAs  
Testing & Evaluating EC Algorithms  
Multiobjective Optimization with EC  
A Unified Approach to EC  
Computational Complexity and EC  
Using Appropriate Statistics  
Neutral Evolution in EC  
Evolvable Hardware  
Representations

W. Langdon, R. Poli  
Michael Vose  
David E. Goldberg  
Darrell Whitley  
Carlos Coello  
Ken De Jong  
Ingo Wegener  
Steffan Christensen  
Tina Yu  
Didier Keymeulen  
Franz Rothlauf

## TUTORIALS ON SPECIALIZED TECHNIQUES & APPLICATIONS

Anticipatory Classifier Systems  
Evolvable Hardware Applications  
Bionics: Building on Biological Evolution  
Quantum Computing  
Grammatical Evolution  
Evolutionary Robotics  
Visualization in Evolutionary Computation  
Software Testing via EC

Wolfgang Stolzmann  
Tetsuya Higuchi  
Ingo Rechenberg  
Lee Spector  
C. Ryan, M. O'Neill  
Dario Floreano  
Christian Jacob  
J. Wegener,  
M. Harman  
Yuval Davidor  
Daniel Howard  
Xin Yao

Making a Living with EC  
Bioinformatics with EC  
Evolving Neural Network Ensembles

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A recombination of:  
**8<sup>th</sup> Annual Genetic Programming Conference (GP-2003) and  
12<sup>th</sup> International Conference on Genetic Algorithms (ICGA-2003)**

**July 12-16, 2003  
(Saturday-Wednesday)  
Chicago, Illinois USA**

[www.isgec.org/GECCO-2003](http://www.isgec.org/GECCO-2003)

**How to Submit a Paper to GECCO:** Papers will be submitted electronically to AAAI, and must *arrive* by **22 January 2003 (Wednesday)**. Papers should be no more than 12 pages long, in the format described on the conference webpage. Details about manuscript format and submission guidelines are available at [www.isgec.org/GECCO-2003/submissions](http://www.isgec.org/GECCO-2003/submissions)

**Each paper submitted to GECCO will be refereed in a rigorous blind review process by one of thirteen *separate and independent* program committees of genetic and evolutionary computation specialists.**

Each paper **MUST** identify a category under which it will be reviewed.

Possible categories include:

- Genetic Algorithms
- Genetic Programming
- Evolution Strategies
- Evolutionary Programming
- Learning Classifier Systems
- Evolvable Hardware
- Real-World Applications
- DNA, Molecular, and Quantum Computing
- Evolutionary Robotics
- Artificial Life, Adaptive Behavior, Agents and Ant Colony Optimization
- Evolutionary Scheduling & Routing
- Search Based Software Engineering
- Coevolution
- Artificial Immune Systems

Review criteria will include *significance* of the work, *novelty*, *clarity*, *writing quality*, and sufficiency of information to permit *replication* (if applicable). The first-named author (or other corresponding author designated by the authors when submitting) will be notified of acceptance or rejection (on approximately the first week of March 2003).

By submitting a paper, the author(s) agree that, if their paper is accepted, they will submit a final revised camera-ready version by the deadline for camera-ready papers (in early April, 2003), they will register at least one author by the deadline for camera-ready papers, and at least one author will attend and present the accepted paper at the conference.

*The material in papers must represent substantially new work that has not been previously published by conferences, journals, or edited books in the genetic and evolutionary computation field.* GECCO permits a paper to be submitted that is substantially similar to a paper being submitted contemporaneously for review in another conference; however, if the submitted paper is accepted by the GECCO conference, the authors agree that substantially the same material will not be published by another conference in the genetic and evolutionary computation field. (Material may be later revised and submitted to a journal if permitted by the journal involved.)

### ISGEC EXECUTIVE BOARD

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